Smirinalty of Hawaii at Manace 2525 Correa Road Honolulu, Hawaii 96822

7N-91-CRAH-Final Technical Report for NAGW-1604 - Water Regime of Phobos

NASA-CR-193356

Only one year of funding (35K) of the three year contract was actually disbursed to the investigator. Nonetheless, two papers on the water regime of Phobos were published.

- 1.) Fanale, F.P. and Salvail, J.R. Loss of Water from Phobos, Geophys. Res Lett. 16, 287-290, 1989.
- 2.) Fanale, F.P. and Salvail, J.R., Evolution of the Water Regime of Phobos, <u>Icarus</u>, <u>85</u>, 380-396, 1990.

These models predicted the depth to the buried ice interface on Phobos and the current $\mathrm{H}_2\mathrm{O}$ flux from Phobos as a function of time and latitude. Two plasma investigations on Phobos II in the Phobos tours/wake appear to have confirmed the predicted flux.

Additionally the Infrared Mapping Spectrometer data and Imaging data from Phobos II were processed at the U of Hawaii map showing the relationship between resulting in a composition (mineralogical) heterogeneity and geologic features of the satellite:

Murchie, S.L., Fanale, F.P. et al. Color Heterogeneity of the Surface of Phobos: Relationships to Geologic Features and Comparison to Meteoritic Analogs. J. Geophys Res, in press, 1991.

> (NASA-CR-193356) WATER REGIME OF PHOBOS Final Technical Report (Hawaii Univ.) 1 p

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